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THE SILVER INSTITUTE

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MINE PRODUCTION OF SILVER IN 1984 WITH PROJECTIONS FOR 1985 1986 1987 1988

THE SILVER INSTITUTE

MINE PRODUCTION OF SILVER

This report presents the mine production of silver in all of the 58 countries of the world which are known to be now producing silver from mines. Of these, 49 are designated as International Trade Countries in this report since there has been a longtime movement of silver between them. The other 9 are Eastern Countries, which are now also participating more in the international movements of silver.

The first group is divided into three sections: the 5 countries each producing more than 20 million troy ounces per year; the 21 countries each producing 1 million to 20 million troy ounces per year; and the 23 countries each producing less than 1 million troy ounces per year.

In all sections, figures for the countries are arranged in the order of size of mine production of silver in 1984. For each country, actual production in 1984 is given, as well as projected production for each of the years 1985, 1986, 1987, and 1988. Amounts are shown in millions of troy ounces for each country and group of countries, with metric ton equivalents for each group of countries.

The figures here presented refer to mine production of silver on the "accountable" basis, indicating the amount of silver which is credited to the mining enterprise.

This study was made with the participation of 242 mining and related entities with headquarters in 26 countries, which gave The Silver Institute their reports and projections. The projections for 1985, 1986, 1987, and 1988 are the totals of individual companies' plans for their mine production of silver in each of these years. Increases and decreases from these plans in individual mines and countries often balance each other. However, there is the fact that any earthquakes, floods, accidents, strikes or unexpected declines in market prices will cause the actual production to be less than the projections. The world mine production of silver in 1984 here reported, was 1.8% less than had been projected one year ago, 2.6% less than had been projected two years ago, and 4.6% less than had been projected four years ago.

Appreciation is expressed for the extraordinary cooperation of the mining and related enterprises which provided the information and projections used in this report. Their names are listed alphabetically by country.

MINE PRODUCTION OF SILVER
On Accountable Basis
In Millions of Troy Ounces

INTERNATIONAL TRADE COUNTRIES

Countries Producing More than 20 Million Troy Ounces per Year:	ACTUAL 1984	PROJECTED 1985	1986	1987	1988
Mexico	63.9	64.4	71.7	72.9	73.6
Peru	53.0	56.7	57.5	58.2	58.3
United States	44.4	39.9	42.5	49.2	49.6
Canada	40.2	45.0	45.6	46.7	44.8
Australia	30.2	32.9	32.2	32.7	32.2
Subtotal	231.7	238.9	249.4	259.6	258.6
Equivalent Metric Tons	7206.3	7431.0	7758.7	8076.1	8042.9
Change from Previous Year		+3%	+4%	+4%	-1%

Countries Producing 1 Million to 20 Million Troy Ounces in 1984:	ACTUAL 1984	PROJECTED 1985	1986	1987	1988
Chile	15.8	16.2	16.8	16.6	16.6
Japan	10.4	10.5	10.5	10.5	10.5
South Africa	7.0	7.0	7.0	7.0	7.0
Sweden	5.8	5.9	6.3	6.7	5.9
Bolivia	4.6	4.1	6.4	6.4	6.4
Yugoslavia	4.1	4.1	4.2	4.2	4.3
Spain	4.0	4.0	4.1	4.0	3.9
Namibia	3.4	3.6	3.5	3.7	3.7
Honduras	2.6	3.0	3.5	3.5	3.5
Morocco	2.4	2.4	2.4	2.3	2.3
Brazil	2.3	2.3	2.3	2.4	2.5
South Korea	2.2	2.2	2.2	2.2	2.2
Greece	1.8	1.8	1.8	1.8	1.8
Argentina	1.7	2.0	2.0	2.1	2.2
Philippines	1.6	1.8	1.8	2.0	2.1
Italy	1.6	1.6	1.6	1.6	1.6
Papua New Guinea	1.5	1.6	1.6	1.6	1.7
Zaire	1.2	1.2	1.2	1.2	1.2
German Federal Republic	1.2	1.2	1.2	1.2	1.2
Indonesia	1.2	1.2	1.2	1.2	1.2
Dominican Republic	1.2	1.5	1.1	1.1	1.1
Subtotal	77.6	79.2	82.7	83.3	82.9
Equivalent Metric Tons	2414.6	2464.7	2572.6	2590.4	2578.2
Change from Previous Year		+2%	+4%	+1%	-1%

Countries Producing Less than 1 Million Troy Ounces in 1984:	ACTUAL 1984	PROJECTED 1985	1986	1987	1988
Iran	0.96	0.96	0.96	0.96	0.96
Zimbabwe	0.90	0.90	0.90	0.90	0.90
Finland	0.87	0.97	0.83	0.83	0.80
India	0.80	0.80	0.80	0.80	0.80
Zambia	0.80	0.59	0.59	0.59	0.59
France	0.78	0.83	0.83	0.83	0.83
Burma	0.58	0.58	0.59	0.59	0.60
Malaysia	0.47	0.46	0.46	0.46	0.46
Denmark (Greenland)	0.45	0.45	0.45	0.45	0.45
Ireland	0.28	0.28	0.27	0.26	0.26
Turkey	0.22	0.22	0.22	0.23	0.23
Algeria	0.12	0.12	0.12	0.12	0.12
Colombia	0.10	0.10	0.10	0.10	0.10
Tunisia	0.10	0.10	0.10	0.10	0.10
Great Britain	0.07	0.07	0.07	0.07	0.07
Nicaragua	0.05	0.05	0.05	0.05	0.05
Taiwan	0.05	0.03	0.04	0.04	0.04
Portugal	0.03	0.03	0.03	0.03	0.03
El Salvador	0.03	0.03	0.03	0.03	0.03
Ghana	0.02	0.02	0.03	0.03	0.03
Fiji	0.02	0.02	0.02	0.02	0.02
Ecuador	0.01	0.09	0.13	0.55	0.55
Guatemala	0.01	0.01	0.01	0.01	0.01
Subtotal	7.72	7.71	7.63	8.05	8.03
Equivalent Metric Tons	240.12	239.81	237.33	250.39	249.77
INTERNATIONAL TRADE COUNTRIES					
TOTAL	317.0	325.9	339.8	351.0	349.5
Equivalent Metric Tons	9861.0	10135.5	10568.6	10916.8	10870.9
Change from Previous Year		+3%	+4%	+3%	-1%
EASTERN COUNTRIES					
Soviet Union	51.4	52.5	53.5	54.6	54.0
Poland	23.9	24.4	24.9	25.4	25.1
China People's Republic	2.9	2.9	3.0	3.1	3.0
North Korea	1.6	1.6	1.7	1.7	1.7
German Democratic Republic	1.3	1.3	1.3	1.4	1.4
Czechoslovakia	1.0	1.1	1.1	1.1	1.1
Bulgaria	0.8	0.9	0.9	0.9	0.9
Romania	0.7	0.8	0.8	0.8	0.8
Hungary	0.1	0.1	0.1	0.1	0.1
TOTAL EASTERN COUNTRIES	83.9	85.5	87.2	89.0	88.1
Equivalent Metric Tons	2608.3	2660.4	2713.6	2767.9	2740.2
Change from Previous Year		+2%	+2%	+2%	-1%
WORLD TOTAL	400.9	411.4	427.0	440.0	437.6
Equivalent Metric Tons	12469.3	12796.0	13282.3	13684.7	13611.2
Change from Previous Year		+3%	+4%	+3%	-1%

CONTRIBUTORS OF INFORMATION
ON
MINE PRODUCTION OF SILVER

IN 1984 WITH PROJECTIONS FOR 1985 - 1986 - 1987 - 1988

ARGENTINA

Cerro Castillo S.A., Buenos Aires
Compania Minera Aguilar S.A., Buenos Aires
Empresa Minera Cantoni, San Juan
Rio Cincel SAMI y C., Buenos Aires
Secretaria de Mineria, Buenos Aires
Sociedad Minera Pirquitas Picchetti y Cia. S.A., Buenos Aires
Yacimiento Minero de Agua de Dionisia, Buenos Aires

AUSTRALIA

Aberfoyle Limited, Melbourne, Victoria
Australian Mining & Smelting Ltd., Melbourne, Victoria
Broken Hill Proprietary Co., Melbourne, Victoria
Central Norseman Gold Corporation Ltd., Melbourne, Victoria
Cobar Mines, Pty., Ltd., Melbourne, Victoria
Electrolytic Zinc Co. of Australasia Ltd., Melbourne, Victoria
Great Boulder Holdings Ltd., Melbourne, Victoria
Homestake Gold Ltd., Norwood, South Australia
Kalgoorlie Lakeview, Pty., Ltd., Melbourne, Victoria
Kalgoorlie Minig Associates, Fimiston, Western Australia
MIM Holdings Ltd., Brisbane, Queensland
Mount Lyell Mining & Railway Co., Ltd., Queenstown, Tasmania
North Broken Hill Ltd., Melbourne, Victoria
North Kalgurli Mines Ltd., Kalgoorlie, Western Australia
Western Mining Corporation Ltd., Melbourne, Victoria
Woodland Mines, Goulburn, New South Wales

BELGIUM

Compagnie Royale Asturienne des Mines, Brussels

BOLIVIA

Corporacion Minera de Bolivia (COMIBOL), La Paz
Empresa Minera Bolivar, La Paz
Empresa Minera Caracoles, La Paz
Empresa Minera Colquechaca, La Paz
Empresa Minera Colquiri, La Paz
Empresa Minera Corocoro, La Paz
Empresa Minera La Palca, La Paz
Empresa Minera Matilde, La Paz
Empresa Minera Quechisla, La Paz
Empresa Minera San Jose, La Paz
Empresa Minera Unificada (EMUSA), La Paz

BRAZIL

Caraiba Metais, S.A., Salvador, Bahia
Departamento Nacional da Producao Mineral do Brasil, Brasilia
Paulista de Metais, Ltda., (Penarroya), Sao Paulo

CANADA

ASAMERA, Incorporated, Calgary, Alberta
Avino Mines & Resources Ltd., Vancouver, British Columbia
Black Hawk Mining Incorporated, Toronto, Ontario
Brenda Mines Ltd., Peachland, British Columbia
Brunswick Mining & Smelting, Toronto, Ontario
COMINCO Limited, Vancouver, British Columbia
California Silver Limited, Vancouver, British Columbia
Dickenson Mines Limited, Toronto, Ontario
Dome Mines Limited, Toronto, Ontario
Echo Bay Mines Ltd., Edmonton, Alberta
Energy, Mines & Resources Canada, Ottawa, Ontario
Equity Silver Mines Ltd., Vancouver, British Columbia
Heath Steele Mines Ltd., Toronto, Ontario
Inco Limited, Toronto, Ontario
Kidd Creek Mines Limited, Toronto, Ontario
Lacana Mining Corporation, Toronto, Ontario
Lornex Mining Corporation, Logan Lake, British Columbia
MNR Reprocessing Inc., Toronto, Ontario
Newmont Mines Limited, Vancouver, British Columbia
Noranda Sales Corporation, Toronto, Ontario
Northgate Exploration Limited, Toronto, Ontario
Pamour Porcupine Mines Ltd., Timmins, Ontario
Placer Development Limited, Vancouver, British Columbia
Renzy Mines Limited, North York, Ontario
Rio Algom Limited, Toronto, Ontario
Sigma Mines (Quebec) Ltd., Val d'Or, Quebec
Teck Corporation Ltd., Val d'Or, Quebec
Terra Mines Ltd., Edmonton, Alberta
United Keno Hill Mines Ltd., Toronto, Ontario
Westmin Resources Limited, Vancouver, British Columbia

CHILE

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Corporacion Nacional del Cobre, Santiago
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Servicio Nacional de Geologia y Mineria, Santiago

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ECUADOR

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Instituto Ecuatoriana de Minera, Quito
Minas de Portovelo, Quito

FRANCE

Mines et Produits Chimiques de Salsigne, Paris
Societe Miniere et Metallurgique de Penarroya, Paris

GERMAN FEDERAL REPUBLIC

Metallgesellschaft AG, Frankfurt
Preussag AG Metall, Goslar

GHANA

Ashanti Goldfields Corporation (Ghana) Ltd., Accra

HONDURAS

Rosario Resources Corporation, San Pedro Sula

INDIA

Hutti Gold Mines Company Ltd., Karnataka
Indian Bureau of Mines, Ministry of Steel and Mines, Nagpur

JAPAN

Akenobe Mining Company Ltd., Hyogo
Chitose Mines Company Ltd., Hokkaido
Furutobe Mining Company Ltd., Akita
Hosokura Mining Company Ltd., Miyagi
Japan Mining Industry Association, Tokyo
Meishin Mining Company Ltd., Hyogo
Mitsubishi Metal Corporation, Tokyo
Mitsui Mining & Smelting Company, Tokyo
Nebazawa Mining Company Ltd.,Gunma
Nippon Mining Company Ltd., Tokyo
Sado Mining Company Ltd., Niigata
Toyoha Mines Company Ltd., Hokkaido
Yatani Mining Company Ltd., Yamagata

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Compania Minera La Negra y Anexas, S.A., Maconi, Queretaro
Compania Minera MSL, S.A. de C.V., Durango
Compania Minera Mexicana de Avino, Durango
Compania de Real del Monte y Pachuca, S.A., Pachuca, Hidalgo
Grucat S.A. de C.V., Mexico, D.F.
Industrial Minera Mexico, S.A., Mexico, D.F.
Industrias Luismin, S.A. de C.V., Mexico, D.F.
Industrias Penoles, S.A. de C. V., Mexico, D.F.
La Encantada, S.A. de C.V., Ocampo, Coahuila
Minera Capela, S.A. de C.V., Coalcoman, Michoacan
Minera Guadalupe, S.A., Real de Guadalupe, Guerrero
Minera Lampazos, S.A. de C.V., Lampazos, Sonora
Minera Mexicana Penoles, S.A., Topia, Durango
Minera Mexicana Sombrerete. S.A., Sombrerete, Zacatecas
Minera Real de Angeles, S.A. de C.V., Mexico, D.F.
Minera San Francisco del Oro, S.A., Mexico, D.F.
Minera Victoria Eugenia, S.A., Chalchihuites, Zacatecas
Minerales de Bolanos, S.A. de C.V., Guadalajara, Jalisco
Restauradora de las Minas de Catorce, S.A., San Luis Potosi
Rosario Mexico, S.A. de C.V., Mexico, D.F.

MOROCCO

Compagnie Miniere de Touissit, Casablanca
Societe Miniere du Djebel Aouam, Casablanca

NAMIBIA

Tsumeb Corporation Limited, Tsumeb, South Africa

PAPUA MEW GUINEA

Bougainville Copper Limited, Bougainville
Ok Tedi Mining Ltd., Port Moresby

PERU

Compania Minera Calloma, Lima
Compania Minera Huaron, S.A., Lima
Compania de Minas Benaventura, S.A., Lima
Empresa Minera del Centro del Peru, Lima
Minas de Arcata, S.A., Lima
Sindicato Minero Pacococha S.A., Lima
Southern Peru Copper Corporation, Lima

PHILIPPINES

Apex Mining Company, Inc., Pasig, Metro Manila
Atlas Cons. Mng. & Dev. Corp. (ACMDC), Makati, Metro Manila
Atok-Big Wedge Mining Co., Inc., Quezon City, Metro Manila
Batong Buhay Gold Mines, Makati, Metro Manila
Benguet Corporation, Mandaluyong, Metro Manila
Benguet Exploration, Inc., Makati, Metro Manila
Bureau of Mines & Geo-Sciences, Ministry of Natural Resources, Manila
Dizon Copper-Gold Operation (Benguet Corp.), Makati, Metro Manila
Hijo Gold Project (NDMC), Makati, Metro Manila
Itogon-Suyoc Mines, Inc., Ermita, Mamila
Lepanto Cons. Mng. Co., Inc., Makati, Metro Manila
Manila Mining Corporation, Makati, Metro Manila
Marcopper Mining Corporation, Makati, Metro Manila
Masbate Gold Operation (ACMDC), Makati, Metro Manila
North Davo Mining Corp. (Amacan), Makati, Metro Manila
Philex Mining Corporation, Pasig, Metro Manila
Siana Project (SURICON), Pasig, Metro Manila
Vulcan Industrial & Mining Corporation, Mandaluyong, Metro Manila

SOUTH AFRICA

Barberton Mines, Johannesburg
Blyvooruitzich Gold Mining Co., Ltd.,Johannesburg
Bracken Mines Ltd., Johannesburg
Buffelsfontein Gold Mining Co., Ltd., Johannesburg
Chamber of Mines of South Africa, Johannesburg
City Deep Limited, Johannesburg
Consolidated Main Reef, Johannesburg
Crown Mines, Ltd., Johannesburg
Deelkraal Gold Mining Co., Ltd., Johannesburg
Doorfontein Gold Mining Co., Ltd., Johannesburg
Durban Roodepoort Deep Ltd., Johannesburg
East Daggafontein Mines, Johannesburg
East Dreifontein Gold Mining Co., Ltd., Johannesburg
East Rand Propietary Mines Ltd., Johannesburg
Free State Geduld Mines, Ltd., Johannesburg
Free State Saaiplaas Gold Mining Company, Ltd., Johannesburg
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Hartebeestfontein Gold Mining Co., Ltd., Johannesburg
Impala Platinum Limited. Johannesburg
Kinross Mines Limited, Johannesburg
Kloof Gold Mining Co., Ltd., Johannesburg
Leslie Gold Mines Limited, Johannesburg
Libanon Gold Mining Co., Ltd., Johannesburg

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SOUTH AFRICA continued

Loraine Gold Mines, Ltd., Johannesburg
Marievale Consolidated Mines, Ltd., Johannesburg
Messina (TvL.) Development Company, Ltd., Johannesburg
O'Kiep Copper Company, Ltd., Johannesburg
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President Steyn Gold Mining Co., Ltd., Johannesburg
Prieska Copper Mine (Pty.) Limited, Johannesburg
Randfontein Estates Gold Mining Company, Ltd., Johannesburg
Rustenburg Platinum Mines, Ltd., Johannesburg
South African Land and Exploration Company, Ltd., Johannesburg
St. Helena Gold Mines, Ltd., Johannesburg
Stilfontein Gold Mining Co., Ltd., Johannesburg
Unisel Gold Mining Co., Ltd., Johannesburg
Vaal Reefs Exploration and Mining Company, Ltd., Johannesburg
Venterspost Gold Mining Co., Ltd., Johannesburg
Vlakfontein Gold Mining Co., Ltd., Johannesburg
Welkom Gold Mining Co., Ltd., Johannesburg
West Driefontein Gold Mining Company, Ltd., Johannesburg
West Rand Consolidated Mines Ltd., Johannesburg
Western Areas Gold Mining Co., Ltd., Johannesburg
Western Holdings, Ltd., Johannesburg
Winkelhaak Mines, Ltd., Johannesburg
Witwatersrand Nigel Limited, Johannesburg

SWEDEN

Boliden Mineral AB, Boliden

TAIWAN

Taiwan Metal Mining Corporation, Taipei
Taiwan Power Company, Taipei

UNITED STATES

Amax Incorporated, Greenwich, Connecticut
Amax Lead & Zinc, Inc., Clayton, Missouri
Amoco Metals Company, Englewood, Colorado
AMSELCO Minerals Inc., Denver, Colorado
Anaconda Minerals Company, Denver, Colorado
Asamera Minerals (U.S.) Inc., Sparks, Nevada
ASARCO Incorporated, New York, New York
Bunker Limited Partnership, Kellogg, Idaho

continued

UNITED STATES continued

Battle Mountain Gold Co., Houston, Texas
Callahan Mining Company, Phoenix, Arizona
Clayton Silver Mines, Inc., Wallace, Idaho
Coeur d'Alene Mines Corporation, Coeur d'Alene, Idaho
Consolidated Silver Corporation, Wallace, Idaho
Copper Range Company, Round Mountain, Nevada
Duval Corporation, Houston, Texas
Freeport Indonesia Inc, New Orleans, Louisiana
Freeport Minerals Co., New York, New York
Goldfields Mining Corporation, New York, New York
Hecla Mining Company, Wallace, Idaho
Homestake Mining Company, San Francisco, California
Inspiration Consolidated Copper Co., Claypool, Arizona
Intermountain Exploration Co., Boulder City, Nevada
Kay Mining & Milling Corporation, Las Vegas, Nevada
Kennecott Corporation, Salt Lake City, Utah
Little Squaw Gold Mining Corp., Spokane, Washington
Nerco Minerals Company, Fairbanks, Alaska
Newmont Mining Corpration, New York, New York
Newpark Resources Inc., Metairie, Louisiana
Pegasus Gold Inc., Spokane, Washington
Phelps Dodge Corporation, El Paso, Texas
Pinto Valley Copper Corporation, Miami, Arizona
Placer U.S., Inc., San Francisco, California
Royal Apex Silver Inc., Coeur d'Alene, Idaho
Silver Ventures Corporation, Rollinsville, Colorado
Smokey Valley Mining, Round Mountain, Nevada
St. Joe Minerals Corporation, New York, New York
Sunshine Mining Company, Dallas, Texas
U.S. Bureau of Mines, Washington, D.C.
Union Carbide Corporation, Danbury, Connecticut
United Mining Corporation, Virginia City, Nevada
White Copper Division, White Pine, Michigan

ZAMBIA

Central Statistical Office, Lusaka
Zambia Consolidated Copper Mines Limited, Kabwe